

# Integrating the Monorail

# Interbay draft

## **DRAFT**

PLANNING  
BACKGROUND  
REPORT

JULY 2003



City of Seattle

# Interbay Overview



In November 2002, Seattle voters approved creation of a new public agency, the Seattle Monorail Project, to plan, design and build a 14-mile monorail system commonly known as the Green Line. The City of Seattle has initiated a station area planning program - *Integrating the Monorail* - to make the most of the opportunities presented by the Green Line and encourage the best fit between the monorail and its neighborhood setting.

This planning background report for *Integrating the Monorail: Interbay* summarizes existing plans and conditions in the Interbay segment of the Green Line corridor. Planning background reports for each of the Green Line corridor segments, as well as an overview of the City's station area planning program, are also available (see <http://www.seattle.gov/monorail>).

The Interbay segment runs south from the Ship Canal along the 15<sup>th</sup> Avenue/Elliott Avenue corridor. The guideway will rise over the existing ramps for the Magnolia Bridge at Garfield Street, and the recently constructed ramps at the Galer Street Flyover.

Two stations are proposed in the Interbay segment for the initial phase of construction – the Dravus Street/15<sup>th</sup> Avenue station and the West Mercer/Elliott station. The Dravus Street station is the only proposed station on the route that is not part of an existing Neighborhood Plan. The West Mercer/Elliott station is within the Queen Anne planning area as a part of the Uptown Queen Anne Urban Center.

An Interbay station in the vicinity of Howe Street is included in the planning of the system, but will be deferred. The guideway would be designed to allow for future construction of a station.

## Historic and Cultural Resources

- Interbay Athletic Field is near the station.
- The Elliott Bay shoreline and parks from the south edge of Interbay, including Myrtle Edwards Park, Elliott Bay Park, and Smith Cove. A privately owned, publicly accessible marina and restaurants are just west of Smith Cove.
- The Seattle Parks Department operates the Interbay Play Field, with busy sports play fields on the south side of West Dravus Street at 17th Avenue West.
- The Elliott Bay Trail provides both commuting and recreational connections, from the north end of downtown, through Myrtle Edwards Park, and ending at Alaskan Way and Broad Street.



## ||||| Neighborhood Plan Summary

### Neighborhood Vision and Goals

- Ballard-Interbay-Northend Manufacturing and Industrial Center (BINMIC) is one of two industrial centers in Seattle. The Neighborhood Plan emphasizes retention of industrial uses, and improvements to infrastructure that support industry and family wage jobs.
- Transportation is key to a strong industrial base, and the Neighborhood Plan identifies a number of freight mobility improvements to better connect this area with the regional transportation system.
- The 15<sup>th</sup> Avenue/Elliott Avenue corridor is critical to freight mobility for BINMIC, and the Plan, and needs to accommodate trucks and their turning movements.
- The Plan supports transit improvements, both to increase accessibility to jobs and to offer transit alternatives for those that currently commute via freight routes such as 15<sup>th</sup> Avenue West.

### Key Activities and Current Issues

- The Port of Seattle is beginning a master planning process to consider the future use of nearly 100 acres of upland property in Interbay. Their master plan will also include the National Guard property to the east side of the railroad tracks.
- The City is considering three options for the location of a reconstructed Magnolia Bridge.
- Amgen's research and technology center south of Galer Street will bring hundreds of jobs to the Interbay area. Amgen's campus will be connected across the railroad tracks to the 15<sup>th</sup> Avenue corridor by a pedestrian overpass at Prospect Street. The pedestrian area along the shoreline will be improved as part of the project.
- Smith Cove Park will increase by approximately two acres through purchases of land through the Pro-Parks levy.

## ■■■■ Comprehensive Plan Housing and Employment Goals

- The West Dravus and Elliott Avenue Monorail stations are adjacent to the Ballard-Interbay-Northend Manufacturing Industrial Center (BINMIC). As a manufacturing/industrial center, BINMIC's primary role is being a center for industries such as manufacturing, warehousing, marine uses, transportation, utilities, construction and business services. It is not intended to be a residential or mixed-use community, and housing is generally prohibited throughout the manufacturing/industrial center.
- Out of the BINMIC's 941 acres, 107 are within a quarter mile of a monorail station.
- Between 1995 and 2001, BINMIC saw a 13% increase in jobs. The 1,800 jobs created over those six years were equivalent to 48% of the Center's 20-year job target of 3,800 new jobs. Half of the new jobs were in the construction and resource industries, and another half were in the Finance, Insurance, Real Estate and Services Industries, particularly Business Services, which includes many high tech companies.
- Approximately 400 new housing units could be built, and 1,100 new jobs could be created within a quarter mile of the Dravus Street monorail station, if all vacant and underdeveloped parcels were to be redeveloped. The Dravus Street station would be outside an urban village and adjacent to a manufacturing/industrial center; there is no plan for housing growth in this area.
- Just under half of those new jobs could be accommodated in the industrial zones of the manufacturing/industrial center. Another large percentage would be in the automobile-oriented C1 and C2 areas, which are intended to provide a transition between the industrial and residential areas in this station area. Less development could occur in the more pedestrian-oriented NC zones in the area. There is some potential for limited multi-family development within a quarter mile of this monorail station.

## ||||| Transportation

### Overview

The 15<sup>th</sup> Avenue West and Elliott Avenue link is the only direct north-south arterial connection between Ballard and Magnolia and downtown Seattle, and is an important truck route for the Ballard-Interbay area.

Interbay is primarily served by Metro Routes 15 and 18. South of West Galer Street, there is additional service on Metro Routes 19, 24, and 33 along Elliott Avenue West. Metro Routes 17 and 31 skirt the north end of the area along West Nickerson Street.

Narrow sidewalks, paved planting strip areas, wide streets and high traffic volumes detract from the pedestrian and bicycle experience and make crossing the corridor east-west challenging.

On-street parking at Interbay segment station areas is free, typically unrestricted and generally available for most parking users. On 15<sup>th</sup> Avenue West and Elliott Avenue West, parking, for the most part, is prohibited in both travel directions during the AM and PM peak periods.





## Vehicular Circulation

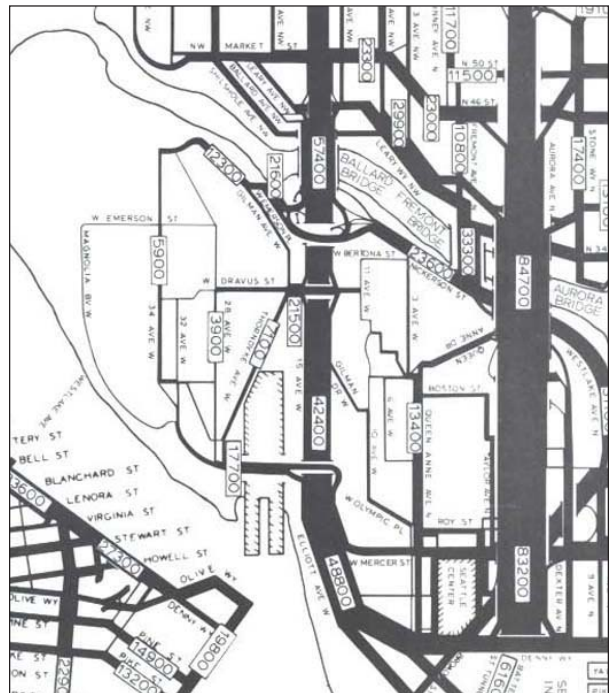
The principal arterials, 15<sup>th</sup> Avenue West/Elliott Avenue West, run north and south, crossing over the Ship Canal waterway by means of the Ballard Bridge drawbridge (with two lanes in each direction). This corridor provides an alternate route to SR-99, with connections between downtown Seattle, Myrtle Edwards Park, Magnolia and Queen Anne, the light industrial areas of Interbay, the Port of Seattle, and the Fisherman's Terminal. These principle arterials are designated over-size vehicle routes. Most intersecting east/west street access to 15<sup>th</sup> Avenue West is provided via ramp access to the overpasses. The signals are all interconnected, except at the Galer Street Flyover signal.

This corridor is bound on the west side by topography, rail yards, and water, providing limited east/west connections. The Queen Anne and Magnolia neighborhoods are connected to this corridor via the overpasses at West Nickerson Street and West Dravus Street. There is an additional structure allowing access to the Magnolia neighborhood and the Port of Seattle provided by means of the Magnolia Street Bridge. There are further access opportunities to Queen Anne and the Seattle Center via at-grade signalized connections at Gilman Drive West, West Mercer Place and West Harrison Street.

West Dravus Street is a minor arterial with two lanes in each direction and a parking lane on the south side that runs east and west, connecting the Magnolia and Queen Anne neighborhoods via the Dravus Street Bridge. There are two bridge structures, with minimal pedestrian facilities, on West Dravus Street - over 15<sup>th</sup> Avenue West and over the railroad between 17<sup>th</sup> Avenue West and 20<sup>th</sup> Avenue West. East of 17<sup>th</sup> Avenue West, on-street parking is not permitted. West Dravus Street has a short, two-way left-turn lane between the southbound on-ramps connecting to 15<sup>th</sup> Avenue West, and ending at the alley between 17<sup>th</sup> Avenue West and 16<sup>th</sup> Avenue West. There are two full signals on either side of the Dravus Street Bridge at each on/off ramp to 15<sup>th</sup> Avenue West that

operate in flash mode (all-way-stop mode) between 4:00 and 6:30 PM and operate as integrated full signals during all other hours.

SDOT is currently studying replacement alternatives for the Magnolia Bridge, which was damaged in the Nisqually Earthquake. Three alternatives are being studied under environmental review, to be completed in 2004. Under the best-case scenario, construction could begin in approximately four years, by 2007.



Traffic flow in Interbay

## Street Classifications

The City's Street Classifications are intended to comprehensively integrate multiple vehicular, freight, non-motorized and access needs, minimize modal conflicts, reflect and reinforce adjacent land uses, and provide the basis for identifying and prioritizing capital improvements and operating changes.

The transit classification identifies a street's suitability for serving as a route for different levels of bus service, including 15<sup>th</sup> Avenue West, West Garfield Street, and Elliott Avenue West as the major transit streets in this segment.



Street classifications in Interbay

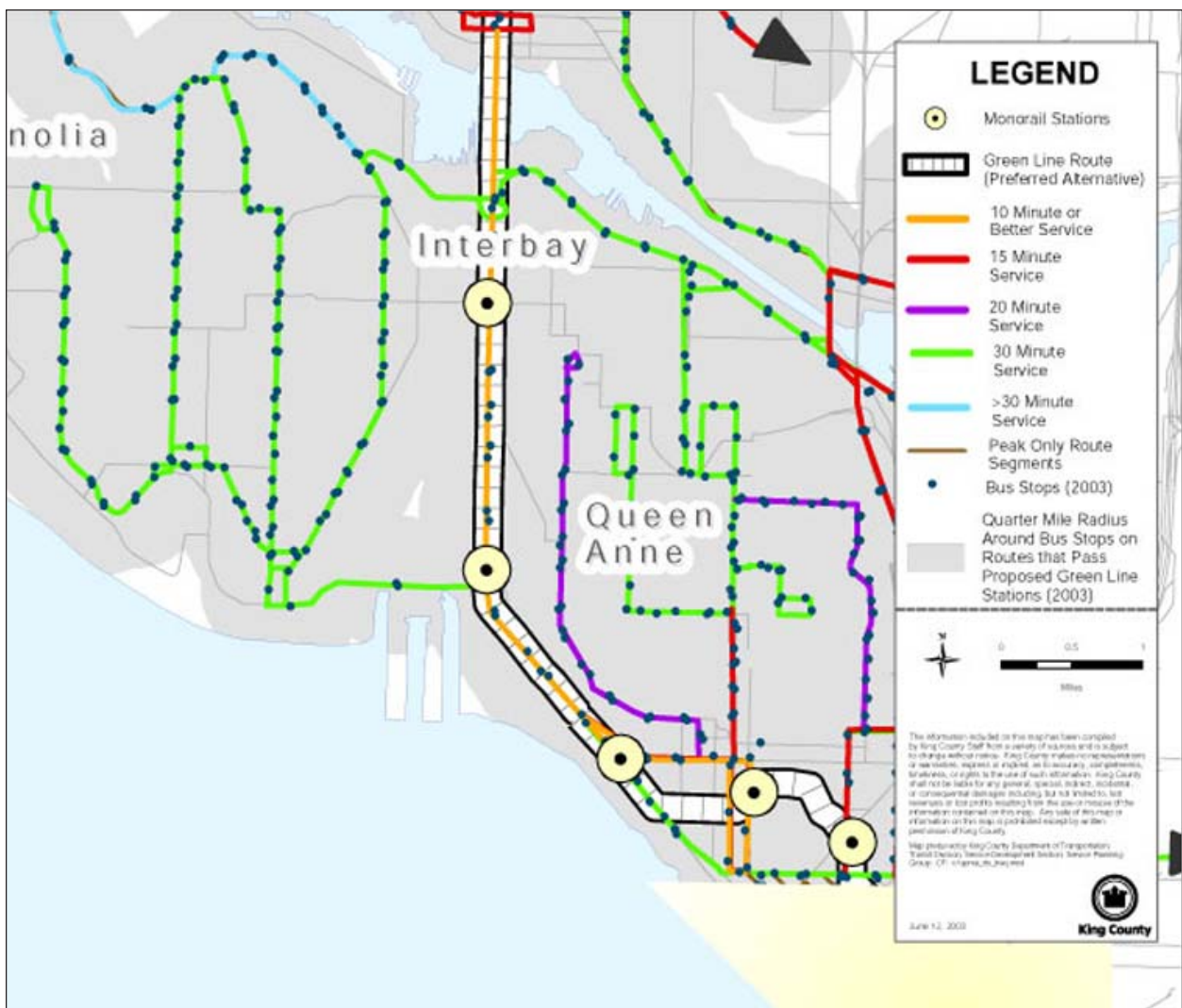


## Transit Service

The map shows Metro routes that serve station areas or could do so with minor modifications. Midday frequencies are color coded, and areas within a quarter-mile of bus stops are shaded.

Interbay is primarily served by Metro Routes 15 and 18. South of West Galer Street, there is additional service on Routes 19, 24, and 33 along Elliott Avenue West. Metro Routes 17 and 31 skirt the north end of the area along West Nickerson Street.

Metro Routes 15 and 18 provide 10-15 minute trunk service on the 15<sup>th</sup> Avenue West/Elliott Avenue West corridor between Mercer Place and Ballard during all hours of operation. Metro Routes 24 and 33 connect Magnolia to downtown, with intermediate stops on Elliott Avenue; both routes complete a total of three or four trips per hour. Metro Route 19 offers supplemental peak service to and from Magnolia in the peak direction.



Transit service in Interbay

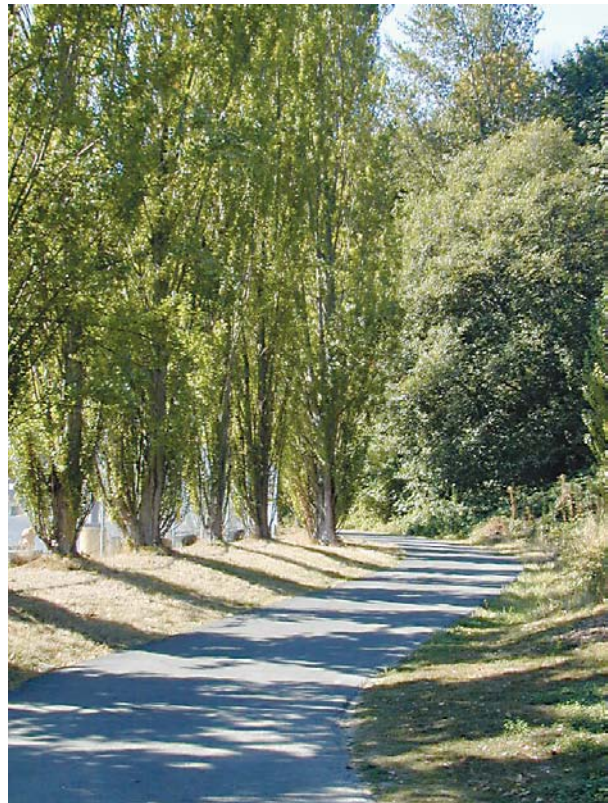
## Pedestrian Environment

Dravus Street is a challenging street for pedestrians, and has a number of accessibility problems. Curbs are high, and some curb ramps are missing.

Most of the streets within the Dravus Street station area have been provided with sidewalks, although sidewalk width varies. Through much of the corridor, narrow sidewalks, paved planting strip areas, and high traffic volumes detract from the pedestrian and bicycle experience, and make crossing the corridor east-west challenging. Surface parking lots and numerous driveway curb cuts on 15<sup>th</sup> Avenue West further diminish the pedestrian environment. Only the north side of the Dravus Street bridge over 15<sup>th</sup> Avenue West has a sidewalk, connecting to the west slope of Queen Anne Hill.

Off West Dravus Street, 17<sup>th</sup> Avenue West (just east of the Interbay Play Field) has an unsignalized marked crosswalk and there are marked signal-controlled crosswalks at both the east and west ends of the Dravus Street Bridge. The Seattle Parks Department operates the Interbay Play Field, with busy sports play fields on the south side of West Dravus Street at 17<sup>th</sup> Avenue West.

Further south along 15<sup>th</sup> Avenue West, the corridor has no marked un-signalized crosswalks, although all pedestrian crossings are marked and provide signalized protection. There is one pedestrian activated half-signal located at West Armor Street and 15<sup>th</sup> Avenue West.





## Bicycle Network

In the Magnolia area, several arterial streets and bicycle lanes serve bicycles traveling from Magnolia and Ballard to downtown Seattle, including bike lanes along Gilman Avenue West to Discovery Park and the Ballard Locks. The bicycle path coming south from Ballard splits at the north end of the Port property in Interbay, and cyclists must choose the west route to Smith Cove, or the eastern path towards downtown Seattle. Cyclists going from downtown Seattle to Smith Cove must travel around the Port's property.

SDOT recently completed the West Galer Street Flyover in 2002, which includes a separate facility for pedestrians and bicycles. The at-grade connection

has been closed to vehicles and bicycles.

The Ship Canal Trail runs along the south side of the water from the Fremont Bridge to 6<sup>th</sup> Avenue West. SDOT plans to extend the trail to the Ballard Bridge and the Fisherman's Terminal with funding from the Pro Parks Levy, with possible construction in 2004.

The Elliott Bay Trail provides both commuting and recreational connections between Magnolia to the downtown Seattle waterfront, out of the way of heavy vehicle traffic along 15<sup>th</sup> Avenue West/Elliott Avenue West.



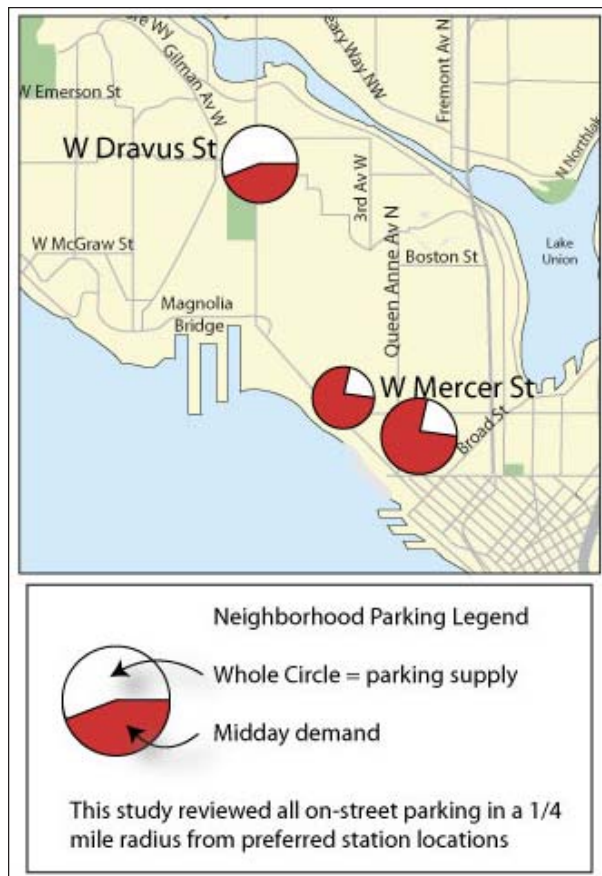
Bicycle trails through Interbay

## Parking

On-street parking at Interbay segment station areas is free, typically unrestricted and generally available for most parking users. On 15<sup>th</sup> Avenue West and Elliott Avenue West, parking is generally prohibited in both travel directions during the AM and PM peak periods.

For off-street parking, most of the non-residential development provides on-site parking via parking lots between the street and building storefront.

For non-residential zones typically found in the Interbay segment, for example, Commercial zones, the location and access of parking is not generally restricted. Depending on the land use, a typical 4,000 square foot retail development would require about 4 parking spaces. Park and ride lots are permitted under conditional use in all Commercial and Industrial zones.



Parking conditions in Interbay